

EQUITY MARKETS DON'T FIT ALL COMPANIES: AN ANALYSIS OF
PUBLIC-TO-PRIVATE DEALS IN CONTINENTAL EUROPE

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Abstract

This paper studies going private deals in Continental Europe. During the last years a growing number of companies decided to exit the public markets for equity, opting for alternative financial sources that could better fulfil their needs. The delisting story seem somehow new and less studied for European countries (other than UK) where exchange markets developed both in terms of number of companies listed and investors participation just in the second half of '90s. After a brief description of Public-to-Private market, we discuss the main advantages of going private buyout and try to link them with literature so to detect a list of factors that could explain deals wealth gains for existing shareholders. We then measure wealth gains both in terms of cumulative average abnormal returns and premiums. On a dataset composed by 106 PTP deals concluded in Continental European countries in the period 2000-2005 we obtained a 18.78% CAAR

and a 21,2% premium. Such results are lower than literature findings related to the US and UK markets. We run a multivariate regression to describe how such abnormal returns may be explained by deals characteristics, such as poor stock market performance, company size, shares turnover, cash flows and leverage. We also try to identify the influence on PTP abnormal return of costs of being listed, type of buyer and length of listing period since IPO. Our results partially confirm the evidence found by previous studies in other contexts. Undervalued and recently listed firms register higher CAARs. Buyout deals promoted by financial investors show a negative impact on CAARs.

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0. Introduction

Company access to equity markets has always been one of the most studied topics by finance and business administration researchers. Literature on Ipos characteristics and benefits of accessing a public market is widespread and concerns all major markets. Less attention has been dedicated to evaluate the performance of the quotation strategy, particularly when it doesn't lead to the expected benefits and it turns into a delisting process. A stock exchange listing is prestigious, hard to get and costs a fortune. So why throw it away?

During the last years a growing number of companies decided to exit the equity market, opting for alternative financial sources that could better fulfil their needs. Delisting is not certainly a new story in absolute terms: the M&A wave of the 80's cut heavily the composition of the US listings. More recently the increased information burden introduced by Sarbanes Oxley Act induced many more US companies, mainly small and medium sized, to leave the Stock Exchangeⁱ.

The delisting story seem somehow new and less studied for European countries (other than UK) where exchange markets developed both in terms of number of companies listed and investors participation in the second half of '90s.

As stated by literature a Public-to-Privateⁱⁱ (PTP) deal usually results in a wealth gain for shareholders. The magnitude of such gains can be measured by an event study that captures the cumulative abnormal returns (CAARs) over a window of time centred on the announcement day. Such a premium is around 30% for US market. The UK equity market has been recently studiedⁱⁱⁱ, with results similar to the US. By contrast there's just one paper that addresses the PTP market in the broader European context (where 60 cases are from UK and 55 from other European countries)^{iv}. In this latter paper the PTP abnormal return is around 24%.

Our paper focus on the Continental Europe context: we analyze 106 PTP transactions concluded in Italy, France, Germany, Netherlands and Spain between 2000 and 2005. First we calculate abnormal return associated with PTP transactions in our broader dataset.

Once measured, we try to explain the magnitude of the PTP abnormal return by a list of explicative variables such as poor stock market performance, company size, shares turnover, cash flows availability and leverage. We also try to identify other factors that

may be reflected in the PTP abnormal return. Among these we hypothesize a relevant role for direct costs of being quoted. The typology of buyer, financial or industrial, could have also an impact on PTP CAAR. Finally we consider the number of year from initial IPO to verify if the PTP abnormal return may be explained by an excessive optimistic expectation of listing benefits at the initial public offering date.

This paper is structured as follows. Section 1 focuses on the PTP market transactions and briefly explain the rationale and structure of PTP deal. Section 2 provides a literature review and discusses the hypothesis we want to test on the empirical part. Section 3 presents our database and the related descriptive statistics. Section 4 illustrates the research methodology and discusses our results. Section 5 concludes.

1. PTP market in Continental Europe

Historically, the first relevant wave of public to private transactions was in the US during the '80s. The US going private buyout market developed from less than 1 billion \$ to more than 600\$ billion in 1988. Such activity slowed down after the anti-take over legislation approval and started back again in the late 90's. By year 2000 PTP deals increased, thanks to the decline in stock market prices and, more recently, to the introduction of the Sarbanes Oxley Act in 2002^v. The UK market followed a similar path, with a first wave culminated in 1989, followed by a growing public hostility that led to the Panel on Takeovers and Mergers. A second PTP wave started in 1997 along with the development of private equity and debt financed activities and the disregard for small companies by institutional investors^{vi}.

As opposed to the US-UK case, in major European countries a real wave of PTP deals started just in the late Nineties and developed in the first years of the new century. Indeed

it is just from the half of the 90's decade that the number of listed companies rose substantially in European equity markets. In some countries innovation in the regulation of M&A (i.e. the introduction of minority squeeze out provision and fiscal reforms) made easier the rules to manage a PTP deal. An even more relevant role in fuelling the PTP market in Europe has been the increasing presence of financial intermediaries, such as private equity funds and other institutional investors interested in diversifying their portfolio with equity stakes. Public market conditions soon after the crash of the internet bubble welcomed them in looking for under priced but promising companies to buy out. Table 1 reports details on amounts and number of PTP deals in major countries in the last twenty years. Compared to the US and UK cases, there's no doubt that PTP market in Continental Europe is still in its infancy. Among Continental Europe France is by far the most active country in terms of deals number^{vii}, followed by Netherlands and Germany. The Italian and the Spanish markets developed just very recently, particularly in terms of values.

In the European context the basic technique to delist a company is a takeover bid in which the potential buyer try to acquire shares from the public of investors. Each country has its own legislation and procedures on buyout^{viii}. As a common feature the takeover is articulated in two steps: a first offer (voluntary^{ix} or mandatory^x), which aims at acquiring the control over the company, followed by an eventual residual offer, finalized to collect all shares still outstanding and obtain the delisting of the company. If the controlling shareholder reached at least 95% of the capital, the "squeeze out" provision allows the compulsory purchase of minority shareholdings by the buyer. As a result of the residual offer the buyer can ask the cancellation of the company from listing.

A frequent alternative to obtain delisting without a 100% control over the company is through a going private merger, i.e. the target is integrated in a not listed company (i.e. the acquisition vehicle): in such a case delisting will occur automatically without any official application for delisting to due authorities.

2. Background literature and hypothesis

There is a rich literature supporting that PTP generate wealth gains for pre-buyout stakeholders. Such gains are usually measured as Cumulative Average Abnormal returns (CAARs) generated by the announcement of a PTP buyout. Table 2 reports main findings. De Angelo et al. (1984) find significant positive returns on the announcement of a PTP and significant negative returns when it was announced that the PTP proposal had been withdrawn. Torabzadeh and Bertin (1987) find that significant abnormal returns accrue to the shareholders of PTP targets if financed by debt. Frankfurter and Gunay (1992) find that insider and outsider shareholders gain as a result of PTPs. Thus there is strong evidence that PTPs generate gains to insider and outsider shareholders, suggesting that there are strong incentive effects in the decision to go private. This would also be consistent with Jensen and Meckling (1976) who argue that increased shareholdings help to align shareholder and director interests.

As an alternative way to measure the shareholder wealth effect of a PTP deal, some author (see table 3) computed the premium paid by the buyer in the transaction, i.e. the difference between the price offered by the buyer and the price of the share before announcement of the acquisition deal. The relevant difference between CAARs and premiums is attributed^{xi} to the fact that abnormal returns take into account the probability of failure in a buyout deal (indeed they are computed as difference between effective

market returns and expected returns) while premiums do not. CAARs and premiums therefore should not be considered perfect substitutes to measure wealth effect in a buyout deal.

More recent literature on PTP is focused on UK markets, since these latter saw a wave of PTPs between 1997 and 2003. These researches follow two paths. The first analyze factors that influence the decision to change the status of a publicly quoted company to that of a private company (Weir-Laing-Wright, 2005). Results are consistent with incentive and monitoring explanations of going private. The second strand examines the magnitude and the sources of the expected shareholder gains in PTP (Renneboog-Simons-Wright, 2005 and 2007). If going private involves advantages or reduces disadvantages of being listed then market prices should reflect such gains as soon as the delisting strategy is announced to the public. Indeed a positive abnormal return would signal that the company is better off out of the public listing.

Following a similar approach we now discuss the main advantages cited by promoters of going private buyout and try to link them with PTP literature so to detect a list of factors that could explain PTP deals.

2.1 Undervaluation

A very frequently claim to justify delisting is the chronic undervaluation of shares by the market. In other words, the market seems systematically not interested in the company, no matter company results, industry performances or global trends.

As suggested by Goh et al (2001) undervaluation could be considered a consequence of information asymmetries between insiders “informed shareholders” and outsiders. Indeed insiders know deeply investment opportunities and can better estimate future earning

growth, while outsiders base their evaluations on public data releases and communication events managed by the company. Underperformance may be considered a consequence of the company low capability to communicate to the market the value created. In such circumstances prices do not reflect the real economic value of the company and capitals will flow towards other companies more able to catch and keep the interest of the market investors. As a consequence the value of the firm can be highly different if estimated by insiders or outsiders. Halpern-Kieshnick-Rotenberg (1999) show that target of going private transactions are underperformers in earnings and market price. Kaestner and Liu (1996) report that MBO related abnormal buying prior to a PTP announcement is linked to insider's superior knowledge about the value of the firm. Goh et al (2001) infer that by tendering a premium price takeover bid a buyout group formed by managers or buyout specialists reveal their private information.

Underperformance will have further consequences for new equity capital raising. Indeed a depressed price will discourage the company to collect new equity funds on the market, since the cost would be prohibitive. In such situation company may be induced to get out the public listing and collect funds in the private market, unless it will postpone investment plans to better times. More patient sources of funds, such as private equity, could therefore be better for the above mentioned company. Finally a depressed price could represent a serious problem if the company is planning acquisition to be paid in shares. Indeed M&A would result too much costly.

As a consequence we expect greater wealth gains for shareholders of higher underpriced companies.

2.2 Small size and turnover effect

For small and medium sized companies underpricing may be even exacerbated given public market information costs (Grossmann-Stiglitz, 1980) and investors characteristics. Small dimensions and limited amount of floating shares may favour illiquidity and thus lack of interest by analysts and institutional investors for two reasons. On one side analysts do not pay too much attention to small-medium companies, since just a few investors could be interested to them. This in turn contributes to maintain lack of information about small and medium sized companies. Firms neglected by analysts' investors, financial analysts, and other investment agencies suffer from lack of information or asymmetric information (Arbel-Strebel, 1982). Thus, neglected stocks should earn substantially higher returns to compensate for this gap of equal access to firm information. Elfakhani-Zaher (1998) show that small firms suffer from lack of public information and therefore are neglected.

On the other side the investment policies of institutional investors are usually biased towards highly liquid shares, easy to sell back without market impact in case of need. In the case of small companies the minimum investment amounts needed by an institutional investor to justify information costs for selection and management of the participation will easily overpass the public disclosure obligation thresholds^{xii}. Therefore usually mutual funds do not take relevant stakes in small companies, even if their shares are often priced at discount.

As a consequence we expect higher advantages from PTP for small companies and/or with less traded shares.

2.3 Cash flows

Separation of ownership and control fosters agency costs (Jensen and Meckling 1976). In particular managers may spend free cash flows on projects that do not earn the required positive net present value (Jensen, 1986). Such agency costs may be higher in a listed company, since managers may be less strictly monitored, unless there is a strong pressure from the market for corporate control. As a consequence, PTP may be driven by the opportunity to return free cash to shareholders. Earlier studies on the US markets tried to understand how cash flows may influence PTP deals and obtained mixed results. Lehn and Poulsen (1989) and Singh (1990) papers support to the free cash flow hypothesis by reporting that firms going private have greater free cash flow than firms remaining listed. Same authors found that PTPs exhibited lower sales growth, indicating poorer growth prospects, further supporting Jensen (1986). Later Lehn and Poulsen's sample was reanalyzed by Kieschnick (1998) with a different technique. Free cash flow and sales growth were found to be insignificant. Further, both Opler and Titman (1993) and Halpern et al. (1999) found no support for the free cash flow hypothesis. Recently the role of free cash flow in PTPs has been investigated by Weir et al (2005) on the UK market, obtaining similar results. Given such mixed results we will therefore try and check if cash flows have any influence on PTP results. Indeed as a matter of fact, high availability of cash flow should make it easier the financing of the buyout.

As a consequence we may expect PTP gains to be positively related with cash flow generated by the target company.

2.4 Leverage ratio

Debate on how debt affect share prices goes back to Modigliani and Miller (1958) who argued that in frictionless markets without taxes, bankruptcy costs, agency costs, and asymmetric information, capital structure does not matter. Anyway these are not typical conditions in real markets.

According to Jensen (1986) debt imposes a stricter discipline on managers, since they are forced to pay out funds that might otherwise have been invested in negative net present value projects. Thereby the prospect to increase debt should enhance the firm's value, particularly in firms with large free cash flows and low growth prospects.

Moreover, low leveraged firms should represent an appetizing opportunity for new potential shareholders, since they could more easily structure an LBO deal to acquire the company. Finally, entrepreneurs of small quoted companies often complain about the fact that in real word an increase in the leverage ratio usually has a negative impact on the public price of their company. Even if the company has positive net present value investments to finance, the market interpret an increase of leverage as higher risk, thus reacting negatively. This forces companies to leave aside such investments. This under-investment problem can harm the value of firms, especially for the firms with high levels of future investment opportunities. Therefore being not exposed to public market evaluation would allow such firms to increase their leverage without effects on a public share price. This in turn could translate into higher investments and shareholders value. Torabzadeh and Bertin (1987) find that significant abnormal returns accrue to the shareholders of PTP targets if financed by debt.

As a consequence we expect wealth gains for shareholders of PTP companies to be negatively related with pre PTP leverage ratio.

2.5 Listing costs

A further reason which may contribute to the decision to go out of the market is the cost burden of being listed. Costs can be referred on one side to the commissions paid to the market management company (i.e. Euronext, Borsa Italiana, etc.). On the other side there are costs linked to meet disclosure obligations and compliance standards fixed by market regulatory bodies (i.e. quarterly data publications, public announcement due on sensitive information, etc...). Finally there are costs that arise from the investor relations infrastructure that listed companies build up in order to develop and keep contacts with the financial community.

All these costs can be considered an example of agency costs specific to listed companies and can have a significant relevance in firms' balance sheets.

Companies may not properly estimate these costs when planning the Ipo. In other cases (such as the US) a change in law may result in a strong cost increase. This argument is today particularly relevant, considering that the Sarbanes Oxley Act of added numerous costs to the burden of being a public company. Carney (2005) reports on the increasing number of companies choosing to terminate reporting under the securities laws. Also in the UK and in Continental Europe a number of reports have specifically addressed the issue, sponsoring the adoption of a Code of Best Practice by quoted companies^{xiii}.

As a consequence we expect higher wealth gains for shareholders of companies which bear higher listing costs and heavy procedures.

2.6 Characteristics of buyer

A takeover bid aiming at going private may be promoted by actual majority shareholders (that sometimes literally buyback the shares of the company, usually through a financial vehicle) or by a new potential shareholder interested to buyout and delist the company. In this case the buyout could be either promoted by a group of managers already working in the target (Management Buy Out), by a financial institution (i.e. private equity house or fund – Investor Buy out) or by a new shareholder, such as a competitors in the same industry (Management Buy In).

The aims of the buyout may therefore be mainly:

- Governance-based, when the actual controlling shareholder buy all floating shares to exit from public market influence;
- Financial, where the buyer intend to participate the target company for a limited period of time (5 to 10 years) and then sell its shares to a new potential investor or back to the market;
- Strategic, where the buyer intend to integrate the target company within his own business and obtain synergies;
- Managerial, where the buyout is promoted by actual management group which may have development plans different from those of the actual shareholders

Aims and characteristics of buyers may be helpful in explaining PTP wealth effects. When the offer is promoted by the actual controlling shareholders, buyback of the whole capital may be justified by the need to “get out of the public eye” to improve operational and strategic flexibility. Management itself may encourage a delisting, in order to execute a strategy away from the public spotlight. Short term earnings pressures on public companies make it hard to develop a long term investment plan. The public market does not award the long term view, forcing managers to provide quarterly results aimed at

gaining favourable reviews from analysts. Sometimes the capital reacquired by current shareholders will be used to allow the entrance of a new minority shareholder, such as a private equity fund (either for *expansion financing or a turnaround*). In both cases the circumstance that is the actual control group who decide to buyback its shares let us infer that being listing is not (or no more) a plus for the company. Maybe the quoting strategy did not lead to expected advantages, in terms of visibility in the financial community, higher liquidity, lower cost of capital. Otherwise costs of being listed overpass such benefits.

There's an abundant series of US papers which relate PTP deals with the market for corporate control, based on the premise that take-over bids are disciplinary and therefore hostile (Morck et al., 1988). A number of studies, Lehn and Poulsen (1989), Singh (1990) and Halpern et al. (1999) found that companies that went private were more likely to experience take-over speculation than firms that did not. As far as the Continental European market is concerned we discard the hypothesis of hostile takeovers. Indeed taking control of a company through public market in Continental Europe is not so easy because frequently more that 50% of capital is still in the hands of the controlling shareholder. Moreover as a matter of fact takeovers of firms, even by private equity, tend to be friendly.

We therefore chose to focus on how the financial or industrial/strategic aim of the buyer may influence CAARs. In this case the intuition is not straightforward. On one side we may attribute more disciplinary power to financial investors than industrial buyers since private equity funds look for capital gains on a medium term horizon, trying and selecting only companies with solid perspectives, possibly undervalued by the public market, and potentially able to produce high returns in 5-7 years time. Moreover equity sponsors

usually influence the management after a PTP deal, supporting one or more new people to strengthen firm's management team and exercise tighter control over their investment. In short private equity funds may not only replace the public market in terms of funding but also give a contribution in managerial and strategic renewal. On the other side an industrial buyer may be interested in acquiring and delisting a company given the potential synergies existing with the business he already owns. He may be a more patient shareholder, given the need to integrate the acquired company with others, and growth potential may be larger than in the case of a pure financial acquisition. As a result the price offered for the PTP may be higher than in the case of a private equity buyer.

As a consequence we expect higher wealth gains in PTP deals promoted by an industrial/strategic buyer.

2.7 Recent Ipo

In the European context an increasing number of companies that recently went private were object of an Ipo no more than a few years before. As far as we know no previous research on PTP investigated such evidence. The fact that time, efforts and costs implied by an Ipo are thrown away after a short period let us infer that maybe the company did not achieve the expected advantages from listing. Listing was not a proper strategy for the firm; therefore the company will be better off outside the market.

A concurrent explanation for such a short life in regulated markets is that listing was planned just to take advantage of a short term bull market^{xiv}. In some recent delisting the Ipo price was higher than the price at which the same controlling shareholder bought back the shares, thus leading to a net gain for shareholders^{xv}. Historically delistings are more common to happen in periods of bad market performance, since the price of the buyout

would be obviously lower. Investors able to select companies with brilliant future prospects, no matter the disaffection of the market, will try to buy them in bear market periods and then resell them to third parties or even the market itself in better times. Insiders that do know better their own company can capitalize on temporary underpricing, by taking the firm private. They will eventually come back to the public market only when the company results and prospects will be evident to outsiders.

Therefore we expect that recent Ipo exiting the market will have a positive relationship with CAARs

2. 8 Other factors influencing CAARs

A quite popular explicative factor cited in literature to explain CAARs in PTP deals is the increasing tax shield for going public companies. Indeed it would be a side effect of the already mentioned potential increase in leverage. Lehn and Poulsen (1988) and Kaplan (1989) found empirical support for such hypothesis. However more recent works, such as Renneboog-Simons-Wright (2005 and 2007) on the UK market and Andres-Betzer-Hoffmann (2004) on European market found no evidence of such effect.

A further factor often mentioned by companies to justify a PTP deal is the company need for a deep restructuring plan. Such need could maybe have an impact on PTP gains. As often claimed by company management, the public market seems to dislike companies under restructure or involved in development plans, since they are deemed to depress profits in the short run. That is particularly true for small companies, whose price could be severely hit by a heavy plan of reorganization. Therefore companies who are planning turnaround or relevant investments often decide to get off the market and be free to conduct their strategies out of the public eyes. Once delisted a long term view could be

more easily adopted. Management could focus more on core business objectives, without the pressure of the market for short term dividends. A US market based study by Hsieh-Jerris-Kross (1999) showed how the beta of a share is influenced by quarterly results. In particular, the beta of small-medium companies suffers higher variability, thus signalling that the market attributes higher risk to such companies. Management is therefore forced to pay more attention to short term results, leaving aside the long term perspective. In practice quoted companies need always to balance high profitable long term projects with less profitable projects with a short term horizon. In more general terms the high level of disclosure required by public listing is often perceived as a strategic hurdle. Indeed companies are not happy to tell their perspectives and projects to the financial community (i.e. their competitors). Many private companies, not only small dimensioned, suggest such strategic issues as the higher disincentive for them to go listed. As a consequence there should be higher wealth gains for shareholders of companies aiming at restructuring after delisted.

A final factor that could induce companies to leave the market and as a consequence impact CAAR is dividend policy. In fact one of the main tools a quoted company has to build up a faithful and stable group of shareholders is the distribution of sound dividends. Indeed dividend payment exercise discipline on managers (Jensen 1986). Besides a constant dividend policy is particularly hard to achieve for companies involved in an intensive growth process. Such companies, at the reverse, are much keener on delay dividend payment to increase self financing, even if the market is not always paying such efforts. As a consequence we could expect higher wealth gains for shareholders of companies with a higher payout ratio.

Next pages will present CAARs measurement and the empirical model used to try and explain it. The dimensions of database forced us to reduce the number of explicative variables. Therefore, given past results we performed a few tests (see footnote xix) and decided to skip the last three factors just above illustrated from the final model.

3. Data, descriptive statistics and methodology

3.1 Data sources and sample description

Our sample consists of 106 public-to-private transactions that took place in major countries of Continental Europe (namely France, Germany, Netherlands, Italy and Spain) during the period 2000–2005. Originally deals were sort from Thomson One Banker database. We then cross checked our database composition with a similar sorting from Mergerstat in order to fill in potential missing deals. Indeed in the Italian case we had to add a few deals to Thomson One Banker selection in order to obtain a more comprehensive set of data. Share prices and indexes values were obtained from Datastream. Balance sheet items and other firm details were obtained from Datastream as well as from Bloomberg.

3.2 Descriptive statistics

Table 4 reports statistics on the value of deals in the database. The average value of a deal is 313 million Euros. The huge difference with the median value let us infer that the majority of deals concerned small and medium sized companies. Our database covers 63% of the deals (106 cases over 167 totally extracted) and 53% of deal value (33,134 million euros on a total of 59,219 million Euros) as for all deals occurred in the period 2000-2005 and reported by Thomson One Banker. We skipped deals concerning banks

and other financial institutions due to the lack of comparability of balance sheet items between this industry and others. As predicted many deals occurred during bear market conditions, i.e. 2002 and 2003.

Table 5 gives further details on database country composition. France and Italy present higher number of deals concluded but companies involved are smaller than in other countries. At the reverse Spain has just 5 deals included but with very relevant dimension. In all countries the average deal value is by far higher than the median value, suggesting once again a not uniform distribution in terms of deal values.

As shown by table 6 companies going private have on average a positive Return on Equity. Lower even if still positive average values of Roe are registered in Italy and France. In terms of assets the average value was calculated in dollars in order to compare it with the US studies. The median assets in our sample is 84 million dollars, i.e. definitely lower than the sample of Kaplan (1989), who registered a median value of assets of 284 million dollars and also lower than in Renneboog-Simons-Wright (2005). The average leverage ratio is 41% and cash flows on sales is on average 10%,

Table 7 reports that 21% of companies included in the database were object of an Ipo less than 5 years before the going out deal. These firms probably were not able to exploit expected advantages from listing or received a cool welcome from the public market, so they decided to leave it after a quite short time. As stated by table 8, 22 out of 106 of the going private deals were concluded by financial buyers (i.e. closed funds, private equity investors, and merchant banks). In these cases the average value of deals concluded is almost twice as much the value of deals concluded by non financial buyers thus signalling the preference of institutional buyers for larger deal (see also Renneboog-Simons-Wright,

2005). This could be considered a consequence of need for a minimum size investment to justify their involvement.

In 66 out of 106 of cases promoters of the going out deal had already a relevant stake in the company^{xvi}. In 59 cases promoters owned more than 50% of the equity capital. Considering all deals on average promoters sought to buy 56.38% of capital. Shares acquired through buyout summed up to 53.59%, leading to a total share ownership of 95.35% after the buyout. Detailed data for each country are somehow different: in France the average amount sought is less than 30%, while in Germany and Netherlands is 80%.

In terms of industry composition, as reported by table 9, basic materials and industrial firms represent more than 48% of the database (35% in terms of value), followed by technological firms and staple companies. We cross checked the database at the country level and results are coherent with the expected industry pattern of each country: in France retail and staple companies prevail, while in Germany and Italy industrial companies are the more represented.

4. Methodology

4.1 CAAR calculation

The first analysis we performed aimed to verify the effect of going private deal announcement on the market for company's shares. An event study centred on the announcement day for the buyout will give evidence to abnormal returns.

For each company abnormal returns were calculated as the difference between the daily logarithmic returns and the expected returns as predicted by the market model. Coefficients α and β were obtained through a regression analysis over a period of 310

until 31 trading days prior to the event using the main index of the market where company was listed^{xvii}. The event period spans from -30 to +30 days with respect to the announcement date. This last date was retrieved through Thomson One Banker. Cumulated average abnormal returns (CAAR) were finally calculated for each company. To test the statistical significance of CAAR we used a t-test.

As showed by table 10, the announcement of a buyout finalized to delisting resulted on average in an 18.78% cumulated abnormal return calculated over a window of 60 trading days centred on the announcement date. More than 80% of the companies registered a positive CAAR.

On average CAARs registered in Continental Europe seem lower than results previously found in literature (see table 2). On a similar time window Renneboog-Simons-Wright (2005) registered for UK a 29.28% CAAR while among the most recent studies on US Goe et al (2002) registered a 21.31% CAAR. The only comparable data available on the European case are from Andres, Betzer and Weir (2007). On the same event window they found a 24.20% CAAR, which is still higher than our results. However is should be noticed that the two database are different, both in terms of countries and years covered. More precisely, our database do not consider UK and cover the period 2000-2005, while in the paper of Andres, Betzer and Weir more than half of the firms are from UK and the time period ranges from 1997 to 2005.

On the announcement day the average abnormal return was 4.64%, while on the interval -1 +1 days the cumulated average abnormal return was 11.33%. This in other words means that it takes at least 3 days to the market to incorporate a major part of potential gains from a PTP deal into the price.

As showed by table 11, results vary quite substantially among countries. On a 60 days window centred on the announcement date CAAR vary from 15.22% calculated in Germany to 23.14% registered in France. On shorter time horizon abnormal returns calculation by country gives less homogeneous results. In Germany, Netherlands and Spain the reaction to the announcement of a going private buyout is mainly concentrated on the first day after the announcement, while in Italy and France it is a much smoother process.

4.2 Premium calculation

The majority of existing literature on delisting measures effects of PTP in terms of CAARs as it is considered the most comprehensive indicator of shareholders gains. A few papers use also an alternative measure (see table 3), i.e. that of the premium paid by the acquirer to existing shareholders. In order to compare our study also with this strain of research and better understand the market reaction to the announcement of a PTP deal we calculated the premium offered by the acquirer as the difference between the price offered at the announcement of the PTP and the current market price 30 days before that announcement^{xviii}. As reported in table 12 we found an average premium of 21,24%, thus higher than the average CAAR by 2,46%. The average premium in Europe is significantly lower than that found by previous studies: in the US it ranged from 32,9% (Easterwood et al., 1994) to 56,3% (De Angelo et al 1984), while in UK the most recent paper registered a 40% premium (Renneboog et al 2007). This difference in premiums is

confirmed by practitioners and usually related to the fact that in the continental European context the public market is not a market for corporate control at all.

We are interested in the absolute value of the premium also because other things being equal a higher premium should impact positively CAARs, at least for opportunities to play merger arbitrage spreads (see Officer, 2007). On the other hand market prices should reflect the probability that the PTP deal is going to succeed, which by definition is lower than 1 when PTP is announced. As highlighted by De Angelo et al (1983), the market price after a PTP announcement may be thought as formed by two components, i.e. the value of going private (weighted by the probability of going private) and the value of the firm as a public concern (weighted by the probability of remaining public). Moreover the same authors argue that CAARs may be reduced by an implicit discount linked to the delay in receiving the payout from the going private compensation. As a consequence, we should no wonder if premiums are different from CAARs. We calculated the regression coefficient between CAARs and premium, resulting in a Pearson coefficient of 0,663 significant at the 0,01 level.

4.3 Regression analysis

As a consequence from hypothesis described in section 2 we tried to explain abnormal returns registered in Continental Europe going private buyout by estimating cross-sectional regression. The analysis has been structured following a stepwise process. We started with the simplest model and progressively added new terms in order to assess separately the impact of different factors on CAAR. Linear regression was performed using the least squares method.

The first model (equation 1) investigates the relation between abnormal return and company undervaluation and size. This allows us to test hypothesis 1 and 2 and to use data related to all the PTP deals in our database.

$$(1) CAAR = \alpha + \beta_1 \text{delta} + \beta_2 \ln MV + \beta_3 VOA + \varepsilon$$

Abnormal returns are measured by CAAR as defined in section 4.1. The first explicative variable we considered to test hypothesis 1 is Delta. Delta is measured as the difference between logarithmic return of a company share price over a period of 12 months (from -310 to -50 days before the announcement day) and logarithmic return of the market price index over the same period. Since undervaluation is often claimed as one of the major causes of delisting we expect a negative relationship between CAARs and Delta.

The second and third independent variables, Ln MV and VOA, test hypothesis 2. Ln MV is a measure of company size. More precisely it is the natural logarithm of Market Value of the company at the date of the last balance sheet approved before the buyout announcement. If the market pays less attention to small companies, they should get higher benefits leaving the market. Therefore we expect a negative relationship between Market Value and CAARs.

VOA is the average of volumes exchanged on the market over a period starting one year before the announcement day and lasting six months. We opted for an average value to solve for leakage of data and extraordinary effects. Other things being equal, low turnover neglected stocks should benefit more going private. As a consequence we expect a negative relationship between average volumes and CAARs.

The estimation results from equation [1] are given in Table 13. The adjusted R-squared is low and the only significant variable is delta. As expected the relation between delta and CAAR is negative to confirm the hypothesis that more undervalued firm obtain higher abnormal returns on PTP deals.

In model 2 we added four additional variables in order to test other hypothesis presented in section 2. Due to missing values on some of such variables the number of observations included in the estimation was reduced to 69.

First, to gain further insight on the impact of undervaluation on CAAR we inserted the *PEA* variable. *PEA* is the average Price Earning registered over a period starting one year before the announcement day and lasting six months. Also in this case we opted for an averaged data in order to avoid lack of values on last balance sheet approval date or the influence of a specific event on the P/E. A high P/E is usually considered a synonymous for high valuation and vice versa a low P/E is more common for undervalued shares. As a consequence we may expect a negative relationship between average P/E and CAARs, since the company should be better off outside the market. On the other side companies with high P/E are supposed to have higher growth opportunities. This could instead turn in a positive relationship between CAAR and PEA.

We then test hypothesis number 3. i.e. PTP gains are positively related with company's cash flow. In fact managers of high cash flows generating companies have greater chances to pursue objectives misaligned with those of the shareholders. Since going private should reduce such misalignment, thanks to a much closer control by shareholders, high cash flows companies should benefit more. Moreover, in the case when is the same controlling shareholders to promote delisting, a company which generates high cash could find it easier to finance the buyback of its own shares.

Therefore we expect a positive relation between cash flows and CAARs. *Cash Flows* are measured as ratio of cash flows to sales resulting from the last balance sheet before the going private announcement.

Leverage is the Debt to Total Capital (Debt+Equity) ratio resulting from the last balance sheet before the going private announcement. A low leverage ratio may encourage buyout since it's easier to finance the deal with debt. Moreover, increasing leverage may not be seen favourably by the market when the company is quoted, while it should be easier to raise debt once delisted. As a consequence we expect a negative relationship between leverage and CAARs.

Finally we consider a listing cost variable to test the hypothesis of a positive relation between listing costs and CAAR. The listing cost variable was calculated for each company according to the annual listing fee declared by the stock exchange where the stock was traded.

Equation 2 sum up model two

$$(2) \quad CAAR = \alpha + \beta_1 \Delta + \beta_2 \ln MV + \beta_3 VOA + \beta_4 PEA + \beta_5 CashFlow + \beta_6 Leverage + \beta_7 Listing\ cost + \varepsilon$$

Table 14 reports estimation results. The R-squared increases but Delta is still the only statically significant variable^{xix}.

Finally in model 3 we add 2 dummy variables to check if CAAR is related to buyer characteristics and to a recent listing.

Dummy buyer is a dummy variable equal to 1 when the buyer is a financial company or a private equity fund and zero otherwise. We expect the stricter selection criteria and higher

knowledge of financial companies would somehow signal a higher capability of the company to better perform outside the public market.

Dummy Ipo is a dummy variable equal to 1 if the company was listed on the stock exchange less than 5 years before the going private decision. When Ipo is aged more than 5 years the dummy value is 0. We inserted such variable to check the relation between the number of years from first Ipo and CAAR. Indeed in the late 90's many companies entered stock exchanges to get advantage from bull market conditions (i.e. high market prices) without a long term rationale to be listed. If this is the case dummy Ipo should exhibit a positive sign. Model three is represented by equation 3

$$(3) \quad CAAR = \alpha + \beta_1 \text{delta} + \beta_2 \ln MV + \beta_3 VOA + \beta_4 PEA + \beta_5 \text{CashFlow} + \beta_6 \text{Leverage} + \beta_7 \text{listing costs} + \beta_8 \text{dummyBuyout} + \beta_9 \text{dummyIpo} + \varepsilon$$

Table 14 reports results of model three. As in previous studies, just a few of the variables hypothesized have a statistical significant influence on CAARs.

The most relevant variable is still Delta, i.e. the variation in market price prior to the announcement day. A negative relationship means that a bad performance in the past results in a higher cumulative abnormal return after the buyout announcement. This supports the idea of underperformance as a major cause for delisting a company. The average Price Earning is not statistically significant. The dimension of the company, approximated by the logarithm of Market Value, has a negative but not significant influence on CAARs.

Liquidity, in terms of volumes exchanged, shows no influence on CAARs. Similarly the cash flow hypothesis was not confirmed. Also in this case past literature had same results. Dummy signalling recent Ipos showed a positive relationship with CAAR, thus indicating

higher gains from going private of recently listed firms. In less than five years time Ipo's upfront costs are not usually completely covered. Therefore a company that decides to leave the market after a short period may have realized that listing benefits are lower than expected. Maybe these companies were just too young and still in their development stage to approach the stock exchange with success. Moreover the market seems to reward these companies since they probably have growth opportunities not fully developed yet so they are a particularly attractive target for buyout deals.

At the end dummy signalling financial buyers had a negative and statistically significant impact on CAARs. Similar result was found on UK market by Renneboog-Simons-Wright (2005), whose paper showed lower CAARs associated with IBO in comparison with MBO and MBI. This evidence supports the idea that the market is recognizing higher value to strategic acquisitions, which are planned to produce synergies in the long run, than to the disciplinary role of a financial investor.

4.4 Regression analysis applied to Premium

In order to cross check the results obtained we run equation number 3 also using as dependent variable the PTP Premium (as defined in section 4.2) instead of CAARs. Results are reported in table 16. In case of the premium the proposed independent variables have a lower explicative power. In particular PEA, i.e. the average price earning, shows a positive relationship with premium. This means that companies which receive higher valuation by the market (i.e. because of better prospects) require on average a higher premium to be acquired. Dummies concerning recent Ipos and financial buyers are confirmed as statistically significant (even if at the 10% level) and present the same signs already shown in the CAARs regressions. In particular we obtained a

confirmation about lower premiums paid by financial acquirer as opposed to strategic ones.

5. Conclusions

This paper focuses of the PTP market in Continental Europe over the period 2000-2005. The analysis was motivated firstly by the increasing interest for going private deals. In the last years delisting became more and more popular in US and UK markets. As reported by Financial Times^{xx}: “The value of companies taken private reached record levels in 2006, with New York and London's stock markets taking the brunt of the \$150bn of de-equitisation”. Continental European public-to-private market appears in an earlier stage of development but there are high expectations, motivated by the growth of private equity funds.

A second relevant incentive to the study was the limited results available on this topic, particularly in the European context. Indeed whilst many of the general principles are common to the Anglo-American and the European contexts, there are important cultural and regulatory differences which suggested the opportunity to investigate and check results for the Continental European market separately. We calculated Cumulative Average Abnormal Returns over a window of 60 trading days centred on the announcement date of a buyout finalized to delisting. CAARs registered in Continental Europe are on average positive (18.78%) but lower than results previously found in literature. Values vary quite substantially among countries. We also calculated the premium paid by the acquirer to existing shareholders. The average value is far below the evidence for US and UK market and no other literature is available on the continental European context on such item. We may hypothesize that a lower premium may be linked

to the fact that in Continental Europe corporate control is hardly bought on public market, even if this finding requires further research.

We run a regression model to explain CAARs by deals characteristics. The cross-sectional analysis of determinants of shareholder gains in Continental Europe going private deals partially confirms the evidence found by previous international empirical studies. The main results are the following. First, undervaluation is the most relevant factor influencing CAARs. Second, the announcement of a going private deal concerning a company just recently listed has a positive impact on market price for that company. Third, PTP deals promoted by financial investors have a negative impact on CAARs. Fourth, PTP on recently Ipos result in higher CAARs. These last two findings are confirmed also by a regression run on the PTP premium.

We believe that our work could give some interesting insides on why equity markets do not fit all companies. We are aware of the main limits of the analysis. Compared to the US researches, our database has a quite limited dimension, but we found many difficulties due to the lack of data. Our multi-country database allowed us to study PTP transactions in major Continental European Countries. Even if delisting regulation and rules in the countries involved are basically similar, local differences in the process could somehow influence the results. This indeed may be a promising area for further research.

Table 1: breakdown of PTP deals in major countries 1984-2005 as retrieved from Thomson One Banker (amounts in million US\$)

Countries	US		UK		Italy		France		Germany		Netherlands		Spain	
	Amount	N.	Amount	N.	Amount	N.	Amount	N.	Amount	N.	Amount	N.	Amount	N.
1984-1989	171,297	382	9,305	46	n.a.	n.a.	1,530	4	n.a.	n.a.	46	2	643	2
1990-1994	17,938	145	2,655	46	516	4	2,654	18	18	9	2	2	526	4
1995-1999	70,943	343	20,695	148	781	14	5,908	41	1,144	9	152	2	40	3
2000-2005	190,808	480	62,344	188	4,072	13	24,853	92	10,760	27	11,996	25	9,093	10
TOTAL	450,985	1,350	94,998	428	5,368	31	34,945	155	11,922	45	12,196	31	10,301	19

Table 2: Sample of previous studies of CAAR in public to private transactions

Author	Number of firms	Geographic Area and sample period	Event window (days before/after announcement)	CAAR
De Angelo, De Angelo, Rice (1984)	74	US 1973-1980	-1,0 -10,+10	22.27% 28.05%
Torabzadeh, Bertin (1987)	48	US 1982-1985	-30,0 -30,+30	18.64% 20.57%
Lehn, Poulsen (1989)	244	US 1980-1987	-1,+1 -10,+10	16.30% 19.30%
Amihud (1989)	15	US 1983-1986	-20, 0	19.60%
Kaplan (1989)	76	US 1980-1985	-40,+60	26.00%
Marais, Schipper, Smith (1989)	80	US 1974-1985	0,1 -69,+1	13.00% 22.00%
Slovin, Sushka, Bendeck (1991)	128	US 1980-1988	-1,0 -15,+15	17.35% 24.86%
Frankfurter, Gunay (1992)	110	US 1979-1984	-50,+50 -1,0	27,32% 17,24%
Van De Gutch, Moore (1998)	187	US 1980-1992	-1,+1 -10,+10	15.60% 20.20%
Goh et al. (2002)	323	US 1980-1996	0,+1 -20,+1	12.68% 21.31%
Renneboog, Simos, Wright (2005)	177	UK 1997-2003	-1,0 -40,+40	22.68% 29.28%
Andres, Betzer, Weir (2007)	115	Europe (with UK) 1996-2002	0 -30,+30	11.94% 24.20%

Table 3: Sample of previous studies of Premiums in public to private transactions

Author	Number of firms	Geograph. Area and sample period	Anticipation window	Premium
De Angelo, De Angelo, Rice (1984)	72	US 1973-1980	40 days	56.3%
Easterwood et al (1994)	184	US 1978-1988	20 days	32.9%
Lehn, Poulsen (1989)	257	US 1980-1987	20 days	36.1%
Amihud (1989)	15	US 1983-1986	20 days	42.9%
Kaplan (1989)	76	US 1980-1985	2 months	42.3%
Weir, Laing, Wright (2003)	95	UK 1998-2000	1 month	44.9%
Renneboog, Simos, Wright (2005)	177	UK 1997-2003	20 days	41.0%

Table 4: Value of deals by year in the database (in million Euros)

Year	N. deals	Mean deal value	Median deal value	Total value
2000	26	181.66	54.19	4,723.14
2001	16	197.13	22.25	3,154.09
2002	27	354.00	62.57	9,558.02
2003	20	159.77	46.73	3,195.34
2004	10	243.24	92.50	2,432.44
2005	7	1,438.82	1,249.43	10,071.77
Total	106	312.59	41.67	33,134.80

Table 5: Value of deals by country in the database (in million Euros)

Country	Number of deals	Mean of deal value	Median of deal value	Total value	% weight (number of companies)	% weight (value of companies)
France	39	108.50	7.21	4,231.61	36.8%	12.8%
Germany	15	593.84	180.60	8,907.62	14.2%	26.9%
Italy	30	215.75	56.83	6,472.60	28.3%	19.5%
Netherlands	17	391.68	62.76	6,658.56	16.0%	20.1%
Spain	5	1,372.88	829.32	6,864.41	4.7%	20.7%
Total	106	312.59	41.67	33,134.80	100.0%	100.0%

Table 6: Profitability and financial key data of companies in the sample (Data related to the last balance sheet approved before announcement of going private deal)

Country		Roe	Roa	Net Assets(\$mil)	Debt/total capital	Cashflow/sales	Price/earning
France	Mean	3.83%	-0.90%	292.58	51.84%	5.36%	23.062
	Median	10.76%	2.60%	44.65	44.00%	7.31%	12.348
Germany	Mean	6.98%	2.07%	711.07	33.55%	11.25%	9.276
	Median	8.38%	3.04%	128.14	31.16%	9.11%	7.885
Italy	Mean	7.89%	3.31%	376.39	36.54%	9.99%	19.684
	Median	7.76%	3.59%	141.71	33.61%	8.99%	15.994
Netherlands	Mean	6.94%	4.19%	224.50	34.66%	17.74%	8.785
	Median	11.00%	5.21%	112.14	33.81%	9.32%	7.671
Spain	Mean	12.34%	7.40%	435.72	20.47%	19.51%	15.976
	Median	9.63%	4.74%	351.32	13.43%	21.00%	14.596
Total	Mean	6.44%	1.96%	369.18	40.74%	10.30%	18.084
	Median	10.04%	4.09%	84.53	38.21%	8.54%	10.861

Table 7: Going private companies listed less than 5 years before

Country	Ipo> 5 years	Ipo< 5 years
France	28	11
Germany	11	4
Italy	29	1
Netherlands	14	3
Spain	2	3
Total	84	22

Table 8: Buyers type in going private transactions

Type of buyer	Number	Average value of deal	Total value
Non Financial	84	259.85	21,830.82
Financial	22	513.82	11,303.98
Total	106	312.59	33,134.80

Table 9: Industry distribution of delisted companies

Industry	Average Companies value (€mil)	Number of companies	Sum of Companies values (€mil)	% weight on values of companies	% weight on number of co.
Consumer Prod&Serv	261.60	9	2,354.43	7.11	8.49
Energy	640.68	1	640.68	1.93	0.94
Healthcare	14.24	5	71.22	0.21	4.72
High Technology	584.95	8	4,679.63	14.12	7.55
Industrial	151.14	34	5,138.76	15.51	32.08
Materials	424.77	17	7,221.08	21.79	16.04
Media	332.33	4	1,329.34	4.01	3.77
RealEstate	1,367.55	3	4,102.64	12.38	2.83
Retail	451.62	7	3,161.34	9.54	6.60
Staples	246.43	18	4,435.69	13.39	16.98
Total	312.59	106	33,134.80	100.00	100.00

Table 10: Daily average abnormal returns (AAR) and cumulative average abnormal returns (CAARs) on 106 Continental European firms object of a going private buyout

Days	AAR	t-stat	CAAR	Number of firms with AR>0	Number of firms with AR<0
-15	0.19%	0.67	0.19%	50	56
-14	-0.05%	-0.17	0.14%	45	61
-13	-0.22%	-0.77	-0.07%	58	48
-12	-0.39%	-1.36	-0.46%	53	53
-11	0.24%	0.83	-0.22%	54	52
-10	0.25%	0.87	0.02%	47	59
-9	0.53%	1.86	0.55%	48	58
-8	0.80%	2.82	1.36%	59	47
-7	0.07%	0.25	1.43%	54	52
-6	0.73%	2.56	2.15%	52	54
-5	-0.27%	-0.95	1.88%	47	59
-4	0.50%	1.75	2.38%	53	53
-3	0.20%	0.71	2.58%	56	50
-2	0.47%	1.65	3.05%	59	47
-1	1.53%	5.38	4.58%	62	44
0	4.57%	16.10	9.15%	73	33
1	2.17%	7.65	11.33%	60	46
2	0.09%	0.31	11.41%	45	61
3	0.35%	1.23	11.76%	57	49
4	-0.02%	-0.08	11.74%	50	56
5	0.00%	0.01	11.74%	49	57
6	0.26%	0.93	12.01%	56	50
7	0.02%	0.07	12.03%	44	62
8	0.06%	0.20	12.08%	46	60
9	0.23%	0.82	12.32%	47	59
10	0.36%	1.28	12.68%	50	56
11	0.86%	3.03	13.54%	51	55
12	0.42%	1.47	13.96%	55	51
13	0.58%	2.03	14.54%	52	54
14	0.06%	0.21	14.59%	49	57
15	-0.13%	-0.45	14.47%	49	57
CAAR (-30+30)					
		66.10	18.78%	86	20

Table 11: Details of cumulative average abnormal returns (CAARs) on Continental European firms object of a going private buyout.

Country	Number of firms	CAAR (-1, +1)	t-stat	CAAR (-15, +15)	t-stat	CAAR (-30, +30)	t-stat	N. CAAR > 0	N. CAAR < 0
France	39	2.09%	3.56	14.60%	24.92	23.11%	39.45	31	8
Germany	15	11.34%	17.37	14.35%	21.97	15.22%	23.31	11	4
Italy	30	9.89%	25.75	13.41%	34.93	16.03%	41.76	26	4
Netherlands	17	15.01%	27.65	14.97%	27.58	15.85%	29.19	14	3
Spain	5	14.82%	18.27	18.57%	22.88	21.93%	27.02	4	1
Full sample	106	6.83%	24.05	14.77%	51.97	18.78%	66.10	86	20

Table 12: Details of PTP premiums on Continental European firms object of a going private buyout.

Country	Number of firms	Mean	Maximum	Minimum	N. Premiums < 0
France	39	26,1%	93,0%	-17,8%	2
Germany	15	18,0%	43,7%	-4,9%	1
Italy	30	15,9%	59,2%	-68,4%	2
Netherlands	17	21,6%	52,0%	1,3%	-
Spain	5	23,2%	60,2%	-0,8%	1
Full sample	106	21,2%	93,0%	-68,4%	6

Table 13: Cross sectional regression for CAARs in Continental Europe

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.304510	0.075763	4.019262	0.0001
DELTA	-0.196350	0.050192	-3.911959	0.0002
LNMV	-0.020755	0.015706	-1.321505	0.1893
VOA	-2.57E-05	5.54E-05	-0.463752	0.6438
R-squared	0.158471			
Adjusted R-squared	0.133225			
Durbin-Watson stat	2.040978			
Prob(F-statistic)	0.000602			

Table 14: Cross sectional regression for CAARs in Continental Europe

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.265852	0.097277	2.732945	0.0082
DELTA	-0.348491	0.060166	-5.792183	0.0000
LNMV	-0.010622	0.019862	-0.534802	0.5947
VOA	5.23E-05	0.000205	0.255371	0.7993
PEA	0.001301	0.000821	1.585538	0.1180
CASH FLOW	-0.064027	0.229709	-0.278733	0.7814
LEVERAGE	0.024202	0.102633	0.235813	0.8144
LISTINGCOST	-1.79E-06	4.67E-06	-0.383483	0.7027
R-squared	0.439823			
Adjusted R-squared	0.375541			
Durbin-Watson stat	1.875270			
Prob(F-statistic)	0.000005			

Table 15: Cross sectional regression for CAARs in Continental Europe

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.310764	0.101846	3.051318	0.0035
DELTA	-0.345822	0.059691	-5.793571	0.0000
LNMV	-0.013319	0.019172	-0.694735	0.4900
VOA	-2.17E-05	0.000178	-0.122282	0.9031
PEA	0.001400	0.000842	1.663229	0.1018
CASH FLOW	-1.06E-05	0.001043	-0.010183	0.9919
LEVERAGE	-0.001574	0.002337	-0.673307	0.5035
LISTINGCOST	2.31E-07	4.06E-06	0.056853	0.9549
DUMMY_BUYER	-0.089763	0.042876	-2.093549	0.0408
DUMMY_IPO	0.112595	0.054816	2.054038	0.0446
R-squared	0.524115			
Adjusted R-squared	0.448976			
Durbin-Watson stat	2.233511			
Prob(F-statistic)	0.000001			

Table 16: Cross sectional regression for Premium in Continental Europe

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.381009	0.381009	3.516401	0.000875
DELTA	-0.107630	0.065081	-1.65386	0.103751
LNMV	-0.018940	0.020461	-0.92561	0.358622
VOA	0.000060	0.000188	0.323018	0.747885
PEA	0.001980	0.000901	2.196731	0.032195
CASH FLOW	-0.000590	0.001119	-0.52373	0.60253
LEVERAGE	-0.002220	0.002480	-0.8942	0.37504
LISTINGCOST	-0.000002	0.000004	-0.37132	0.711799
DUMMY_BUYER	-0.088570	0.046054	-1.92324	0.05954
DUMMY_IPO	0.106419	0.058402	1.8222	0.073766
R-squared	0.302496			
Adjusted R-squared	0.190397			

6. References

Andres C., Betzer A. and Hoffmann M., *Going private via LBO – Shareholders gains in the European market*, paper presented at EFMA 2004 Conference.

Andres C., Betzer A. and Weir C., *Shareholder wealth gains through better corporate governance – The case of European LBO-transactions*, in Financial Markets and Portfolio Management, vol. 21, n.4, December 2007, pp 403-424

Arbel A., Strebel P, *The neglected and small firm effects*, in Financial Review, vol. 17 issue 4, 1982.

Carney W., *The costs of being public after Sarbanes-Oxley: The irony of “going private”*, in Emory Law and Economics Research Paper No. 05-4, February 2005

Cazenave T., Demartini A., *Voluntary delistings from the Paris markets*, in Economic and Financial newsletter, Autorité des Marchés Financieres, Summer 2006

Chen K., Schoderbek M., *The role of accounting information in security exchange delisting*, Journal of Accounting and Public Policy 18 (1999) 31±57

DeAngelo, H., DeAngelo, L. and Rice, E. *Going private: minority freeze outs and stockholders' wealth*, Journal of Law and Economics, 1984, n. 27, 367–402.

Easterwood J., Singer R., Seth A. and Lang D., *Controlling the conflict of interest in management buyout*, in the Review of Economics and Statistics, vol 76, n.3, 1994

Elfakhani S. and Zaher T., *Differential information hypothesis, firm neglect and the small firm effect*, in Journal of Financial and strategic decisions, volume 11, n.2, 1998.

Frankfurter, G.M. and E. Gunay, *Management Buy-outs: The Sources and Sharing of Wealth Between Insiders and Outside Shareholders*, Quarterly Review of Economics and Finance, 1992, Vol. 32, pp. 82–95.

Goh J., Gombola M., Liu F., Chou D., *Going private restructuring and earnings expectations: a test of the release of favorable information for target firms and industry rivals*, working paper presented at 2001 meeting of Financial Management Association, Toronto, Canada

Grossman S. and Stiglitz J., *On the impossibility of informationally efficient markets*, in American Economic Review, vol 70 n.3, p.393, 1980

Halpern, P., Kieschnick, R. and Rotenberg, W., *On the heterogeneity of leveraged going private transactions*, Review of Financial Studies, 1999, 12, 281–309.

Hsieh S., Jerris S. and Kross W., *Quarterly earnings announcements and market risk adjustments*, in Journal of business finance & accounting, 1999

Jensen M., *Agency costs and free cash flow, corporate finance and take-overs*, American Economics Review, 1986, n.76, 323–9.

Jensen, M. and Meckling, W., *Theory of the firm: managerial behaviour, agency costs and ownership structure*, Journal of Financial Economics, 1976, n. 13, 305–60.

Kaestner R. and Liu F., *Going private restructuring: the role of insider trading*, in Journal of Business Finance and Accounting, n. 23, 1996, pp. 779-806

Kaplan S., *The effects of management buyouts on operating performance and value*, in Journal of Financial Economics, vol. 24, 1989, pp 217-254

Kieschnick, R., *Free Cash Flow and Stockholder Gains in Going Private Transaction Revisited*, Journal of Business Finance & Accounting, 1998, Vol. 25, Nos. 1&2, pp. 187–202.

Lehn, K. and Poulsen A., *Free Cash Flow and Stockholder Gains in Going Private Transactions*, The Journal of Finance, 1989, Vol.XLIV, pp. 771–87.

Maupin, R., Bidwell, C. and Ortegren, A. *An empirical investigation of the characteristics of publicly quoted corporations which change to closely held ownership through management buyouts*, Journal of Business Finance and Accounting, 1984, 11, 345–59.

Modigliani F. and Miller M., *The Cost of Capital, Corporation Finance and the Theory of Investment*, in The American Economic Review, 1958

Morck R., Shleifer A. and Vishny R., *Management ownership and market valuation: an empirical analysis*, Journal of financial economics, n.20, 1988, pp 293-315.

Opler T. and Titman S., *The Characteristics of Leveraged Buyout Firms*, in Journal of Finance, vol XLVIII n.5, 1993

Renneboog L., Simons T., *Public-to-private transactions: LBOs, MBOs, MBIs and IBOs*, ECGI Working Paper n. 94/2005

Renneboog L. , Simons T. and Wright M., *Leveraged Public to Private Transactions in the UK*, TILEC Discussion Paper 2005-015

Renneboog L., Simons T. and Wright M., *Why do public firms go private in the UK? The impact of private equity investors, incentive realignment and undervaluation*, in Journal of Corporate Finance, vol. 13, 2007, pp. 591-628

Ritter J. and Welch I., *A review of Ipo Activity, Pricing and Allocations*, in Journal of Finance, vol LVII, n. 4, 2002

Singh, H, *Management Buyouts and Shareholder Value*, Strategic Management Journal, 1990, Vol. 11, pp. 111–29.

Smith P. and Cohen N., *Delisting wave hurts London*, Financial Times, 2 January 2007

Thomsen S. and Vinten F., *Delistings in Europe and the cost of Governance*, April 2007, working paper available at SSRN: <http://ssrn.com/abstract=986603>

Torabzadeh K. and Bertin W., *Leveraged Buyouts and Shareholder Returns*, The Journal of Financial Research, 1987, Vol. 10, pp. 313–19.

Weir C., Laing D, Wright M, *Incentive Effects, Monitoring Mechanisms and the Market for Corporate Control: An Analysis of the Factors Affecting Public to Private Transactions in the UK*, Journal of Business Finance & Accounting, 32(5) & (6), June/July 2005, 0306-686X

Weir C., Laing D, Wright M, *Undervaluation, private information, agency costs and the decision to go private*, Applied Financial Economics, 2005, 15, 947–961

Wright M., Renneboog L., Simons T. and Scholes L., *Leveraged buyout in U.K. and Continental Europe: Retrospect and Prospect*, ECGI Working Paper n. 126/2006

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Footnotes

ⁱ As reported by Financial Times (7 Jan 2007), in 2006 the New York Stock Exchange suffered a net withdrawal of listed capital of \$38.8 billions. In the same year Nasdaq lost \$ 11 billions.

ⁱⁱ A Public-to-Private deal involves the existing shareholders, the management or a private equity provider making an offer for the shares of a publicly quoted company, then taking the company private.

ⁱⁱⁱ See Renneboog-Simons-Wright (2005 and 2007) and Weir-Laing-Wright (2005-1)

^{iv} See Andres-Betzer-Wright (2007)

^v See Carney (2005)

^{vi} See Wright et al (2006)

^{vii} On the French case see also Cazenave-Demartini (2006)

^{viii} On 21 April 2004 European Parliament and Council adopted the Directive 2004/25/EC of on takeover bids. Although deadline for transposition in the Member States was 20 May 2006, many EU countries, among which Italy, Spain, Belgium, still have to update their local rules.

^{ix} The ownership of a quoted company may be obtained by launching a voluntary offer with the aim to acquire at least 60% of public shares. In this case the buyer can offer any price he wants and he is not obliged to promote immediately a further residual offer. However it is quite common to promote a totalitarian offer in order to obtain delisting in a few months from the first offer

^x If the potential acquirer buys on the open market growing portion of the capital of a listed company and such amount reaches 30% of the target capital he is obliged to promote a mandatory offer. In this case the price would be fixed according to a “fair value” established by market regulators. If the mandatory offer allows collecting more than 90% of the capital the buyer will have to promote a second residual offer to buy all remaining shares, so that minority shareholders will be able to sell shares that in a few days will become illiquid.

^{xi} See DeAngelo-DeAngelo-Rice (1984)

^{xii} For instance, public disclosure obligation threshold in Italy is 2%, while in major other European countries it is 5%.

^{xiii} In 1999 UK adopted the Code of Best Practice. By the same period France, Germany, Italy Netherlands and Spain adopted similar codes of conduct for listed companies. See also Thomsen-Vinten (2007)

^{xiv} As reported by FIBV data, during year 2000 more than 700 companies entered Nasdaq and Nyse. Trend was similar in Europe: 399 ipos were concluded in London, 152 at Deutsche Borse, 106 at Euronext, 49 in Borsa Italiana.

^{xv} A well known the case is that of Italdesign-Giugiaro: Ipo occurred on November 1999 at 7 euro per share; buyback occurred in may 2003 at 4,4 euro per share. The most curious think is that the investment bank that prepared the Ipo (including obviously company valuation) was the same to manage the buyout. It should be noticed that in the meanwhile profitability and prospects of the company substantially did not change.

^{xvi} An equity stake is considered relevant when higher than the public disclosure obligation threshold fixed by regulation. In Continental Europe such threshold varies from a minimum of 2% in Italy to 5% in France)

^{xvii} We used Mibtel for Italian companies, SBF250 for French companies, Dax200 for German companies, Madrid SE General for Spanish companies and Amsterdam SE All shares for Dutch companies.

^{xviii} More precisely the premium was calculated in logarithmic terms as $\text{LN}(\text{Price offered for PTP}/\text{Market price})$

^{xix} In further tests we checked the potential influence of return on equity resulting from the last balance sheet before the going private announcement. We wanted to verify if performance had any influence on going private returns. We performed a similar analysis on Tax shield, i.e. the ratio of Tax paid on pre tax income according to the last balance sheet before the going private announcement. Indeed hypothesis 8 implies a positive relationship between tax shield and CAARs. None of these variables add statistical significance to the model, therefore we decided to skip them.

^{xx} Smith-Cohen, *Delisting wave hurts London*, FT 2/1/2007